AMENDMENTS TO THE CLAIMS

The listing of claims will replace all prior versions, and listings, of claims in the application:

Listing Of Claims

1. (Currently Amended) A biomedical superelastic Ti-based alloy containing 5 to 40 at % of Nb that is an element for stabilizing β-phase of Ti, and further containing

(a) one or more elements selected from the group consisting of 10at% or less of Mo, 10at % or less of Ge, 10at % or less of Ga, and 15at % of less of In;

(b) 30 at % or less of a sum total of the one or more elements selected from the group consisting of Mo, Ge, Ga, and In;

(c) 60 at % or less of a sum total of Nb and the one or more elements selected from the group consisting of Mo, Ge, Ga, and In; and

(d) Ti and unavoidable impurities as the residual part.

2. (Canceled)

3. (Currently Amended) A biomedical superelastic Ti-based alloy containing 5 to 40at% of Nb that is an element for stabilizing β-phase of Ti, and according to claim 1, further containing:

(a) one or more elements selected from the group consisting of 7 at % or less of Mo, ~~10 at % or less of Al,~~ 6 at % or less of Ge, and 6 at % of Ga;

(b) 60 at % or less of a sum total of Nb and the one or more elements selected from the group consisting of Mo, ~~Al,~~ Ge, and Ga; and

(c) Ti and unavoidable impurities as the residual part.

4. (Currently Amended) The biomedical superelastic Ti-based alloy containing 5 to 40at % of Nb that is an element for stabilizing β-phase of Ti, according to claim 1, and further containing:

(a) one or more elements selected from the group consisting of 10 at % or less of Mo, ~~15 at % or less of Al,~~ 10 at % or less of Ge, 10 at % or less of Ga, and 15 at % or less of In;

(b) 15 at % or less of Sn;

(c) 30 at % or less of a sum total of the one or more elements selected from the group consisting of Mo, ~~Al,~~ Ge, Ga, and In, and Sn;

(d) 60 at % or less of a sum total of Nb, the one or more elements selected from the group consisting of Mo, ~~Al,~~ Ge, Ga and In, and Sn; and

(e) Ti and unavoidable impurities as the residual part.

5. (Currently Amended) The biomedical superelastic Ti-based alloy containing 5 to 40at % of Nb that is an element for stabilizing β-phase of Ti, according to claim 1, and further containing:

(a) one or more elements selected from the group consisting of 7 at % or less of Mo, ~~10 at % or less of Al,~~ 6 at % or less of Ge, and 6 at % or less of Ga;

(b) 12 at % or less of Sn;

(c) 60 at % or less of a sum total of Nb, one or more elements selected from the group consisting of Mo, ~~Al,~~ Ge and Ga, and Sn; and

(d) Ti and unavoidable impurities as the residual part.

6. (Currently Amended) The biomedical superelastic Ti based alloy according to any one of claims 1, 3 to 5, wherein the alloy is for use in either of a medical guide wire, an orthodontic wire, a stent, an eyeglass frame, a nose pad arm of eyeglass, and an actuator of an endoscope.

7. (Currently Amended) A medical guide wire made of the biomedical superelastic alloy according to any one of claims 1, 3 to 5.

8. (Currently Amended) An orthodontic wire made of the biomedical superelastic alloy according to any one of claims 1, 3 to 5.

9. (Currently Amended) A stent made of the biomedical superelastic alloy according to any one of claims 1, 3 to 5.

10. (Currently Amended) An eyeglass frame or a nose pad arm of eyeglass made of the biomedical superelastic alloy according to any one of claims 1, 3 to 5.

11. (Currently Amended) An actuator of an endoscope made of the biomedical superelastic alloy according to any one of claims 1, 3 to 5.

12. (Withdrawn) A method of manufacturing a biomedical superelastic alloy, comprising the steps of:

(a) preparing an ingot of a Ti-based alloy containing Ti and Nb as an essential component, or the Ti-based alloy further containing one or more elements of Mo, Al, Ge, Ga and In and unavoidable impurities as the residual part;

(b) performing a hot-working and a cold-working on the ingot,

(c) performing annealing subsequent to the cold-working and further a final cold-working of 20% or more on the Ti-based alloy; and

(d) performing heat treatment on the Ti-based alloy at a temperature of 300.degree. C. or more so as not to cause recrystallization or enlargement of crystal grain size due to recrystallization.

13. (Withdrawn) The method of manufacturing a biomedical superelastic Ti-based alloy according to claim 12, wherein the Ti-based alloy containing:

(a) 10 to 40 at % of Nb as an essential component;

(b) one or more elements selected from the group consisting of 10 at % or less of Mo, 15 at % or less of Al, 10 at % or less of Ge, 10 at % or less of Ga, and 15 at % of less of In;

(c) 30 at % or less of a sum total of the one or more elements selected from the group consisting of Mo, Al, Ge, Ga, and In; and

(d) 60 at % or less of a sum total of Nb and one or more elements selected from the group consisting of Mo, Al, Ge, Ga, and Ti and unavoidable impurities as the residual part.

14. (Withdrawn) The method of manufacturing a biomedical superelastic Ti-based alloy according to claim 12, wherein the temperature of the heat treatment ranges from 400 to 500 °C, and heating time ranges from 1 second to 2 hours.

15. (Withdrawn) The method of manufacturing a biomedical superelastic Ti-based alloy according to claim 12, wherein the temperature of the heat treatment ranges from 400 to 500 °C, the heating time ranges from 1 second to 2 hours, and a residual strain of the Ti-based alloy is 1.5% or less after up to 4% tensile elongation.